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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/808,660

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Bing Li

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EXAMINER

SUTHERS, DOUGLAS JOHN

ART UNIT

PAPER NUMBER

2615

MAIL DATE

DELIVERY MODE

09/21/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 10/808,660	Applicant(s) LI, BING	
	Examiner Douglas Suthers	Art Unit 2615	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 August 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 August 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>08/02/04, 01/18/05</u> . | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. The Art Unit location of your application in the USPTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Art Unit 2615.

### ***Drawings***

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "28" has been used to designate both an audio output and hard drive in figure 1. It is believed that the audio output should be "26". Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. The drawings are objected to because the labels for figures 3 and 4 appear to be swapped. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: The specification makes numerous references to "housing 66" not found in any drawing. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the

immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

5. Claim 18 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 18 is dependent on claim 16, which comprises a hard drive.
6. Claim 16 is objected to because it is not a single sentence. Line 9 appears to contain a period.

### ***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 1-13 are rejected under 35 U.S.C. 102(e) as being anticipated by Berhan (US 6487145).

9. Regarding claim 1, Berhan discloses audio system configured to be mounted in a vehicle comprising:

a housing (mounted in the vehicle);

a processing means (figure 3, item 124) communicably connected to a compact disc drive (142), a user interface (110), memory (128), and an audio output (116), wherein the processing means, compact disc drive, user interface, and memory are disposed within the housing (column 4 lines 28-46); and

a hard drive (118) disposed within the housing and adapted to be mounted to the housing and communicably connected to the processing means, such that the hard drive is readily removable from the housing (shown in figure 3);

wherein the hard drive has a storage capacity of at least about 10 Gigabytes (column 5 lines 26-30);

wherein the processing means is configured to read data from a compact disc within the compact disc drive, encode the data into digitally formatted files, and store the files within at least one of the memory and the hard drive (column 4 lines 54-68); and

wherein the processing means is configured to send an audio signal representative of the data in the stored files to the audio output (column 4 lines 54-68).

10. Regarding claim 3, Berhan discloses wherein the processing means is configured to read, encode, and store the data of the compact disc while simultaneously producing an audio signal representative of the data of the compact disc (column 4 lines 54-68).

11. Regarding claim 4, Berhan discloses wherein the audio system is adapted to store the files within at least one of the hard drive (118) and the memory.

12. Regarding claim 5, Berhan discloses wherein the audio system further comprises a connection for communicably connecting additional memory devices for use by the processing means (hard drive connection to base of figure 3).

13. Regarding claim 7, Berhan discloses wherein the audio system further comprises at least one of an AM tuner, an FM tuner, a digital tuner, and a digital receiver (processor receives digital signals).

14. Regarding claim 8, Berhan discloses wherein the audio system is adapted to communicate with a device that is external to the housing (the user).

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15. Regarding claim 9, Berhan discloses wherein the compact disc drive is capable of reading and outputting the data stored on the compact disc within the compact disc drive wherein the data is in compact disc digital audio format (column 4 lines 54-68).

16. Regarding claim 10, Berhan discloses wherein the processing means is configured to read data from a compact disc within the compact disc drive, encode the data into digitally formatted files, and store the files within the memory, with the reading, encoding, and storing of the data occurring at a rate equal to or faster than a normal rate of play of the data (column 5 lines 26-30).

17. Regarding claim 13, Berhan discloses wherein the memory is integral to the processing means, and the processing means is configured to read data from a compact disc within the compact disc drive, encode the data into digitally formatted files, and store the files within the hard drive (column 4 lines 54-68).

### ***Claim Rejections - 35 USC § 103***

18. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.



19. Claims 1-18 rejected under 35 U.S.C. 103(a) as being unpatentable over Berhan (US 6487145).

20. Regarding claim 14, Berhan discloses an audio system configured to be mounted in a vehicle comprising:

a housing (mounted in the vehicle); and

a processing means (figure 3, item 124) communicably connected to a compact disc drive (142), a user interface (110), memory (128), a hard drive (118), and an audio output (116), wherein the processing means, compact disc drive, user interface, hard drive, and memory are disposed within the housing (column 4 lines 28-46);

wherein the processing means is configured to read data from a compact disc within the compact disc drive, encode the data into digitally formatted files, and store the files within at least one of the memory and the hard drive (column 4 lines 54-68);

wherein the processing means is configured to send an audio signal representative of the data in the stored files to the audio output (column 4 lines 54-68).

Although Berhan does not expressly disclose a tuner, the examiner takes official notice that the use of tuners in vehicles was well known in the art, and is believed to be intended by head unit 10, figure 1. The motivation to do so would have been to allow for reception of radio signals. Although Berhan does not expressly disclose wherein the housing meets DIN standards, the examiner takes official notice that DIN standards were well known in the art. The motivation to use such would have been to use a standard that allowed the unit to be put into a wide variety of vehicles, both as new and

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after-market. Therefore at the time of invention, it would have been obvious to one of ordinary skill in the art to further comprise a tuner and a housing that meets DIN standard specifications.

21. Regarding claim 15, Berhan discloses wherein the processing means is configured to read data from a compact disc within the compact disc drive, encode the data into digitally formatted files, and store the files within the hard drive, with the reading, encoding, and storing of the data occurring at a rate equal to or faster than a normal rate of play of the data (column 5 lines 26-30).

22. Regarding claim 16, Berhan discloses an audio system configured to be mounted in a vehicle comprising:

- a housing (mounted in the vehicle); and

- a processing means (figure 3, item 124) communicably connected to a compact disc drive (142), a user interface (110), a hard drive (118), and an audio output (116), wherein the processing means, compact disc drive, user interface, hard drive, and tuner are disposed within the housing (column 5 lines 26-30);

- wherein the hard drive is readily removable from the audio system and is adapted to be communicably connected to a device that is external to the housing when the hard drive is removed from the audio system (shown in figure 3)

- wherein the processing means is configured to read data from a compact disc within the compact disc drive, encode the data into digitally formatted files, and store the

files within the hard drive, with the reading, encoding, and storing of the data occurring at a rate equal to or faster than a normal rate of play of the data (column 4 lines 54-68, column 5 line 50); and

wherein the processing means is configured to send an audio signal representative of the data in the stored files to the audio output (column 4 lines 54-68).

Although Berhan does not expressly disclose a tuner, the examiner takes official notice that the use of tuners in vehicles was well known in the art, and is believed to be intended by head unit 10, figure 1. The motivation to do so would have been to allow for reception of radio signals. Therefore at the time of invention, it would have been obvious to one of ordinary skill in the art to further comprise a tuner.

23. Regarding claims 11, 12, and 17, although Berhan does not expressly disclose wherein the housing meets DIN standards, the examiner takes official notice that DIN standards were well known in the art. The motivation to use such would have been to use a standard that allowed the unit to be put into a wide variety of vehicles, both as new and after-market. Therefore at the time of invention, it would have been obvious to one of ordinary skill in the art to further comprise a housing that meets DIN standard specifications.

24. Regarding claim 18, Berhan discloses wherein the audio system further comprises a hard drive (118).

25. Regarding claim 2, although Berhan does not expressly disclose a removable faceplate, the examiner takes official notice that the use of such was well known in the art. The motivation to have such would have been for added security of unit and prevent theft. Therefore at the time of invention, it would have been obvious to one of ordinary skill in the art to further comprise wherein the audio system further includes a face plate attached to the housing, the face plate being adapted to be readily removable from the housing.

26. Regarding claim 6, Berhan discloses wherein the hard drive has a capacity of at least about 20 Gigabits (column 5 lines 26-30) and is removable (figure 3). Although Berhan does not expressly disclose the use of USB, the examiner takes official notice that USB 2.0 was well known in the art. The motivation to use such would have been to use a widely used standard to allow for compatibility and reuse of existing hard drives. Therefore at the time of invention, it would have been obvious to one of ordinary skill in the art to further comprise where it is a USB 2.0 hard drive.


### ***Conclusion***

27. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Douglas Suthers whose telephone number is (571)272-0563. The examiner can normally be reached on 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on (571)272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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